**Date Submitted: 11/208**

**------------------------------------------------------------------------------------**

**Task 01 - 04:**

Youtube Link: <https://youtu.be/K39GsCUdW6s>

**Added CODE**

**#include** <ti/drivers/ADC.h>

**#include** <ti/display/Display.h>

/\* global variableS FOR GUI COMPOSER \*/

**uint16\_t** adcValue = 0;

**uint16\_t** threshold = 100;

**uint16\_t** trigger = 0;

/\* Open ADC Driver \*/

**ADC\_Handle** adc;

**ADC\_Params** params;

**ADC\_Params\_init**(&params);

adc = **ADC\_open**(Board\_ADC0, &params);

**if**(adc == NULL)

{

//Error Initializing ADC 0

}//end if(adc...

/\* Open Display Driver \*/

**Display\_Handle** displayHandle;

**Display\_Params** displayParams;

Display\_Params\_init(&displayParams);

displayHandle = Display\_open(Display\_Type\_UART, NULL);

**int\_fast16\_t** res;

res = **ADC\_convert**(adc, &adcValue);

**if** (res == ADC\_STATUS\_SUCCESS) {

Display\_printf(displayHandle, 1, 0, "ADC Reading %d", adcValue);

**if**(adcValue >= threshold){

**GPIO\_write**(Board\_GPIO\_LED0, Board\_GPIO\_LED\_ON);

trigger = 1;

} **else**{

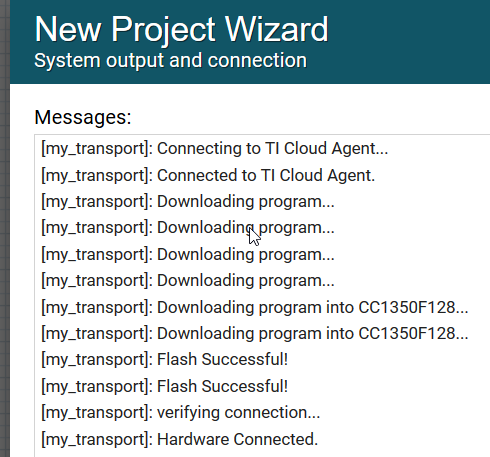
**GPIO\_write**(Board\_GPIO\_LED0, Board\_GPIO\_LED\_OFF);

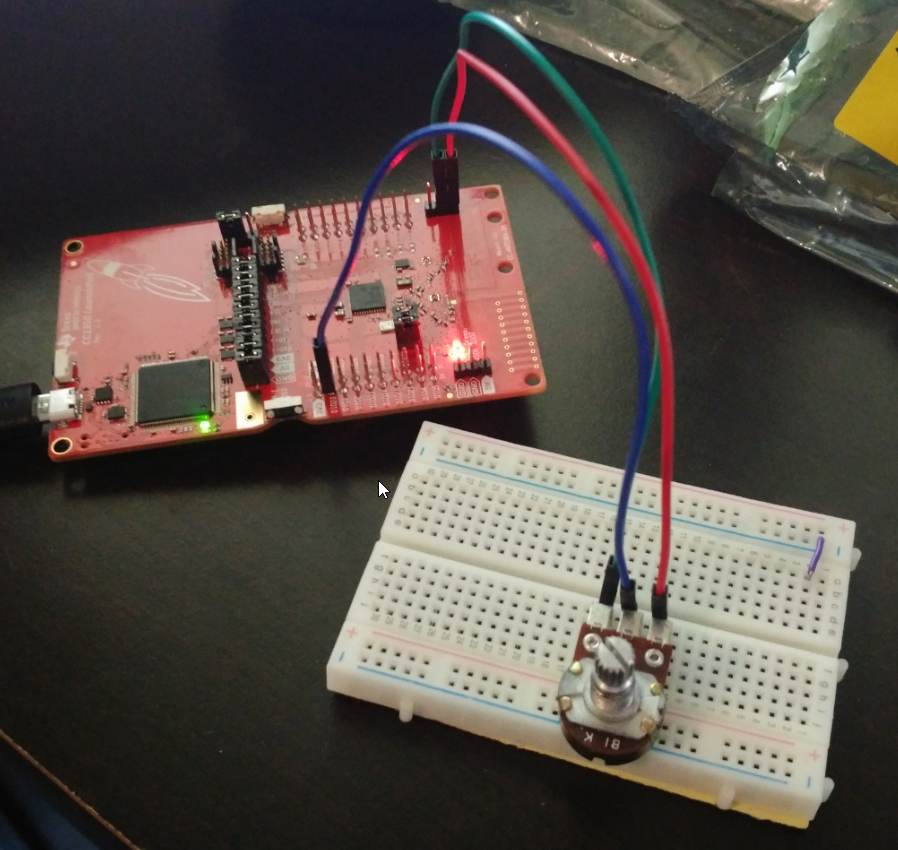
trigger = 0;

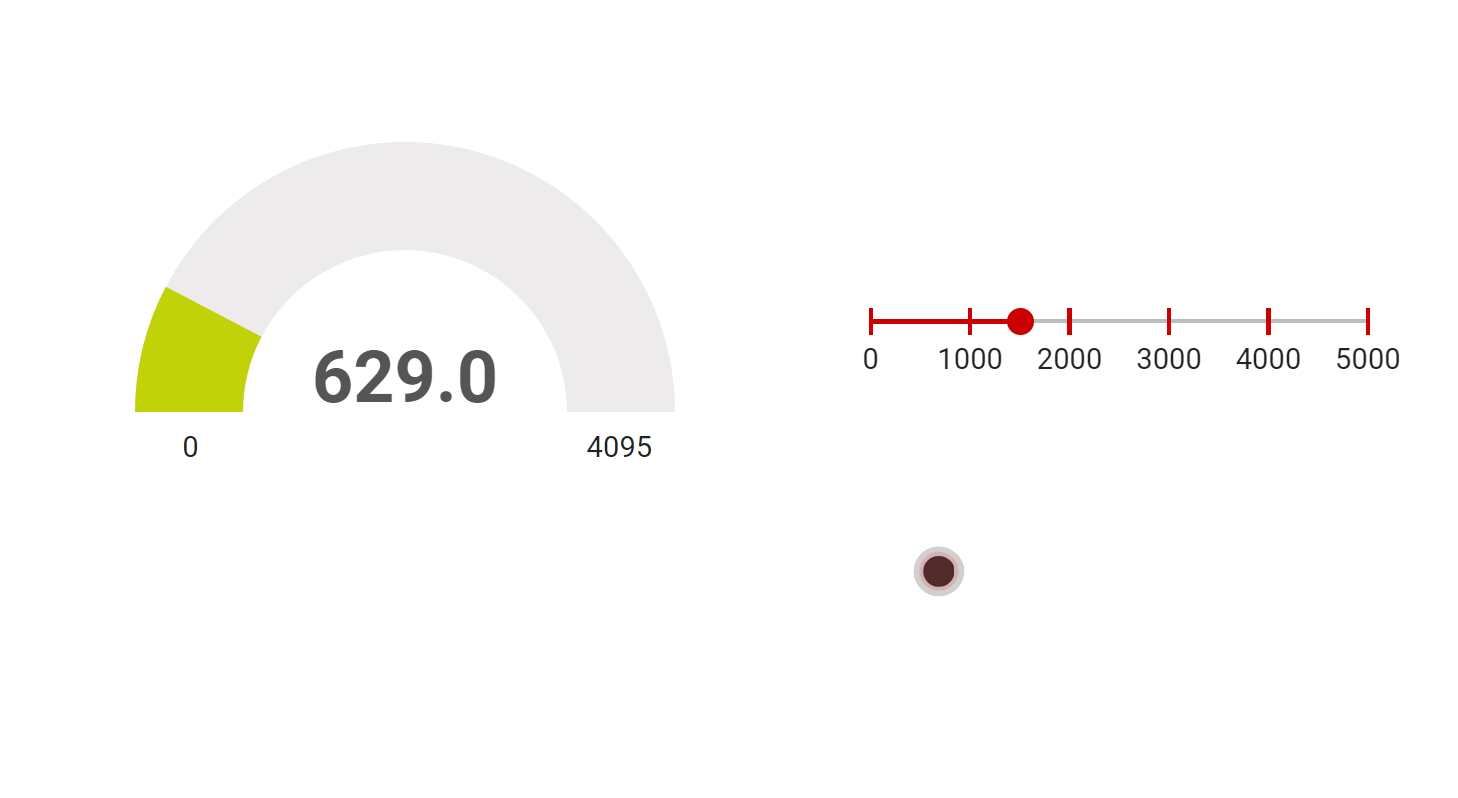
}

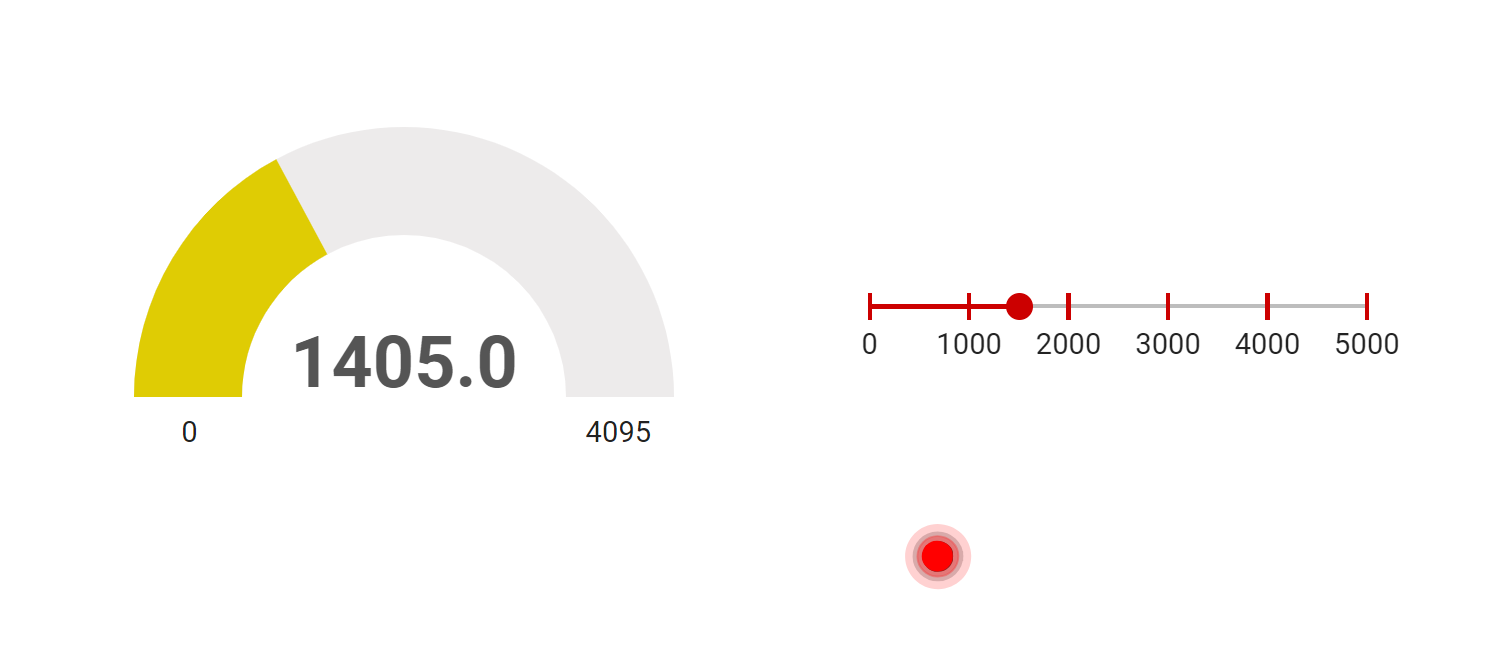
}

**usleep**(time);



****





**------------------------------------------------------------------------------------**